

CLAIMS

1. An ice maker having a fan assembly, comprising:
 - a main body constructed such that an ice-making tray in which ice is made is
 - 5 pivotably supported to a main body frame of the main body; and
 - a fan assembly mounted to the main body frame of the main body to supply cold air to the ice-making tray,
 - the fan assembly comprising:
 - a housing including first and second housing portions of which the interiors are
 - 10 partitioned by partition plates to define a cold air flow passage and which form a discharge duct that communicates with the cold air flow passage to supply the cold air to the ice-making tray;
 - a box fan unit which is fixed in the cold air flow passage defined within the first and second housing portions while coupling the first and second housing portions to
 - 15 each other and supplies power for forcibly delivering the cold air; and
 - mounting hooks for resiliently hanging and mounting the first and second housing portions on the main body frame.
2. The ice maker as claimed in claim 1, wherein the first and second housing
- 20 portions have concavo-convex coupling portions formed such that concave and convex portions of one of the first and second housing portions correspond to convex and concave portions of the other housing portion, thereby setting relative positions of the housing portions and provisionally assembling the housing portions.
- 25 3. The ice maker as claimed in claim 2, wherein the housing comprising the first and second housing portions is provided with a housing cover on a side thereof opposite to the main body frame, and the housing cover is formed with an inlet to supply the cold air to the cold air flow passage.
- 30 4. The ice maker as claimed in any one of claims 1 to 3, wherein each of the first

and second housing portions is provided with mounting ribs for fixing the box fan unit, and the first and second housing portions are coupled to each other by fixing the box fan unit to the mounting ribs.

5 5. The ice maker as claimed in claim 4, wherein one of the housing portions of the housing is formed with a recess that has a fastening hole formed therethrough, and the housing cover is provided with a fastening rib which is seated in the recess and fastened by means of a screw that passes through the fastening hole and is fastened to the other housing portion.

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6. The ice maker as claimed in claim 5, wherein the housing cover has a hanging rib formed at one side thereof and a catching rib is formed on the housing at a position corresponding to the hanging rib such that the hanging rib can be hung on the catching rib, and the housing cover is guided to an installation position thereof as the fastening rib
15 is seated in the recess of the housing portion.

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7. The ice maker as claimed in claim 6, wherein the inlet formed in the housing cover, the flow passage defined within the housing, and the discharge duct and an outlet thereof exist on a straight line.

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8. A method of controlling an ice maker which has a fan assembly for supplying cold air to an ice-making tray and in which an ice-making operation, an ice-releasing operation, a water-supplying operation and an operation for detecting a full level state of ice are controlled automatically, the method comprising:

a fan driving step of driving a fan assembly to supply the cold air to the ice-making tray during the ice-making operation is performed; and

a fan stopping step of stopping the fan before the ice-releasing operation is performed, and performing the fan driving step again after checking ice release, water supply and the full level state of ice.

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9. A method of controlling an ice maker having a fan assembly for supplying cold air to an ice-making tray, comprising:

a first step of operating the fan assembly;

a second step of monitoring whether an ice-making operation has been
5 completed, in a state where the fan assembly is operated;

a third step of stopping the fan assembly when the ice-making operation has been completed;

a fourth step of performing an ice-releasing operation and a water-supplying operation after the fan assembly is stopped; and

10 a fifth step of performing an operation for detecting a full level state of ice after the water-supplying operation, and returning to the first step and repeating the above steps if the full level state of ice is not detected, or standing by until the full level state is released if the full level state is detected.